New Jersey Assessment of Skills and Knowledge

Grade 7 MATHEMATICS REFERENCE SHEET

Use the information below, and on the back, to answer questions on the Mathematics section of the Grade Seven Assessment of Skills and Knowledge (NJ ASK 7).

The sum of the measures of the interior angles of a triangle = 180°

Distance = rate × time

Simple Interest Formula: $A = P + Prt$ **Compound Interest Formula**: $A = P(1+ r)^t$

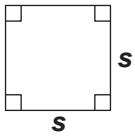
A = amount after t years; P = principal; r = annual interest rate; t = number of years

$\pi \approx$ **3.14 or** $\frac{22}{7}$

Square

Area = s^2

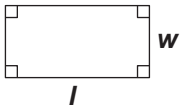
Perimeter = $4s$



Rectangle

Area = lw

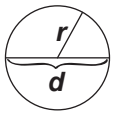
Perimeter = $2l + 2w$



Circle

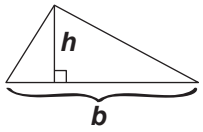
Area = πr^2

Circumference = $2\pi r$ = πd



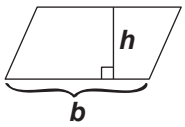
Triangle

Area = $\frac{1}{2}bh$



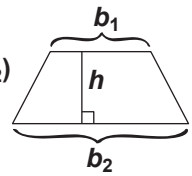
Parallelogram

Area = bh



Trapezoid

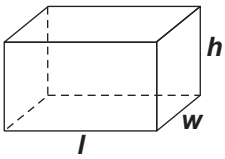
Area = $\frac{1}{2}h(b_1 + b_2)$



Rectangular Prism

Volume= lwh

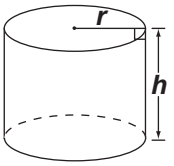
Surface Area= $2lw + 2wh + 2lh$



Cylinder

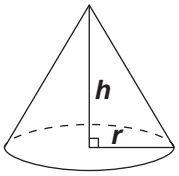
Volume = $\pi r^2 h$

Surface Area = $2\pi rh + 2\pi r^2$



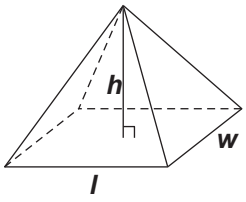
Cone

Volume = $\frac{1}{3}\pi r^2 h$



Pyramid

Volume = $\frac{1}{3}lwh$



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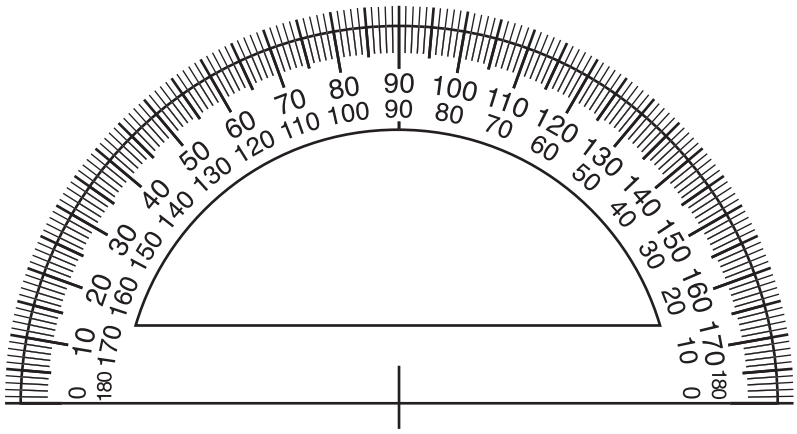

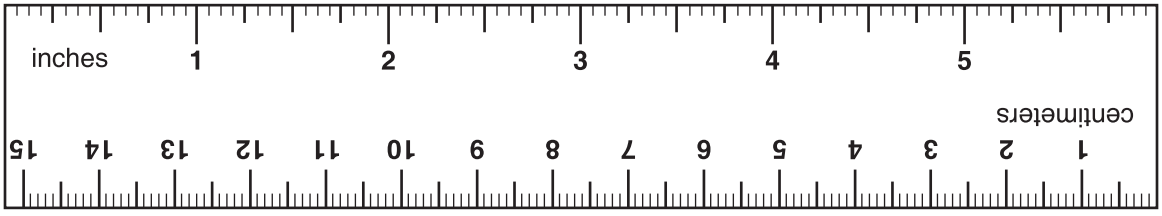

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USE THE FOLLOWING EQUIVALENTS FOR YOUR CALCULATIONS

60 seconds = 1 minute 60 minutes = 1 hour 24 hours = 1 day 7 days = 1 week 12 months = 1 year 365 days = 1 year	12 inches = 1 foot 3 feet = 1 yard 36 inches = 1 yard 5,280 feet = 1 mile 1,760 yards = 1 mile	10 millimeters = 1 centimeter 100 centimeters = 1 meter 10 decimeters = 1 meter 1000 meters = 1 kilometer
8 fluid ounces = 1 cup 2 cups = 1 pint 2 pints = 1 quart 4 quarts = 1 gallon 1000 milliliters (mL) = 1 liter (L)	16 ounces = 1 pound 2,000 pounds = 1 ton 1000 milligrams = 1 gram 100 centigrams = 1 gram 10 grams = 1 dekagram 1000 grams = 1 kilogram	

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